



World Premiere for Lexus Kinetic Seat Concept at the Paris Motor Show

15 September 2016

- **Revolutionary fibre net construction re-evaluates the principles of car seat occupancy**
- **Rotational movement of the cushion and back rest simulates the way in which human mobility uses spinal movement to help keep the head stable**
- **Spider's web-pattern flexible net closely fits the occupant's body shape, dispersing load to provide prolonged seat comfort and body support**
- **The back rest threads are made from environmentally friendly synthetic spider silk materials***

Lexus will show its revolutionary Kinetic Seat Concept as a stand-alone feature for the first time on its stand at the Paris motor show, revealing a revolutionary design that re-values the principles of car seat occupancy.

In the human body, the spine acts to keep the head stable; it allows the pelvis and chest to rotate in opposite directions while keeping the head in place, even when walking or jogging.

Lexus has sought to recreate this movement with its Kinetic Seat Concept, in which the seat cushion and back rest are designed to move in relation to occupant weight and external force. Thus, simply sitting in the seat helps stabilise head movement caused by the motion of the vehicle, keeping the occupant's field of vision steady and making driving easier and more comfortable.

The seat frame upholstery consists of a spider's web-pattern net with threads that radiate from the centre of the back rest. The net is flexible enough to closely fit the shape of the occupant's body, dispersing the load to make it possible to sit comfortably for prolonged periods.

The centre of the back rest is at shoulder blade height, which induces rotational movement of the chest around the seat's pivotal axis. This helps keep the head stable and ensure a high level of support. The seat has a slimmer design, which helps reduce the vehicle's overall weight.

The threads that form the back rest's spider's web-pattern construction are made from environmentally friendly synthetic spider silk materials*, instead of petroleum-derived substances. The main component of this material is protein, created using microbial fermentation, then spun and processed into a new material with superior shock absorption (toughness) properties.

Lexus will host a press conference on its stand in hall 4 at the Paris motor show, at 1.30pm on press day, 29 September.

*QMONOS™ material developed by Spiber Inc.